**Custom Functions Code Example I**

# Improved A-B-A: Creating form with custom functions

# Setup

from earsketch import \*

setTempo(120)

# Music

# A section

def sectionA(startMeasure, endMeasure): # create an A section, placing music from startMeasure (inclusive) to endMeasure (exclusive)

#Add sounds and track numbers to the fitMedia() functions below

fitMedia(sound, track, startMeasure, endMeasure) # main

fitMedia(sound, track, startMeasure, endMeasure) # drums

fitMedia(sound, track, startMeasure, endMeasure) # bassline

fitMedia(sound, track, startMeasure, startMeasure + 1) # backing

fitMedia(sound, track, startMeasure + 2, startMeasure + 3) # backing repeated

# B section

#Add sounds and track numbers to the fitMedia() functions below

def sectionB(startMeasure, endMeasure):

fitMedia(sound, track, startMeasure, endMeasure) # sparse drums

fitMedia(sound, track, startMeasure, endMeasure) # rattling

fitMedia(sound, track, startMeasure, startMeasure + 1) # backing

# Setting up an ABA musical form through function calls

#Change the numbers below to see how the form changes

sectionA(1, 5)

sectionB(5, 9)

sectionA(9, 13)

**Custom Functions Code Example II**

# Custom Functions: Defining our own function that makes a section of music

# Setup

from earsketch import \*

setTempo(100)

# Music

# Defining our new function with two parameters

def myFunction(startMeasure, endMeasure):

#Add the sound and track into the fitMedia() functions below.

fitMedia(sound, track, startMeasure, endMeasure)

fitMedia(sound, track, startMeasure, endMeasure)

# Calling our function, passing it two arguments: 1 and 17. Change these numbers below and see the effect.

myFunction(1, 17)

Sandwich as a metaphor for custom functions

* Imagine your favorite fast food restaurant that serves sandwiches
* Their menu
* Ex. Chick-fila
  + When you go the Chick-fila you can just order a Chick-fila sandwich
  + This is already baked into their internal instructions
  + Code that has been abstracted away from us
  + We just have to give them the special name to implement those instructions
  + Ex. Sections of music with a particular line of code